

Translation

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PCT/FR2003/000803

PATENT COOPERATION TREATY

PCT



10/507329

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference R 02032	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/FR2003/000803	International filing date (day/month/year) 13 mars 2003 (13.03.2003)	Priority date (day/month/year) 13 mars 2002 (13.03.2002)
International Patent Classification (IPC) or national classification and IPC C09D 7/12		
Applicant RHODIA CHIMIE		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☐ (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
- This report contains indications relating to the following items:
 - ☒ Box No. I Basis of the report
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☒ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 09 octobre 2003 (09.10.2003)	Date of completion of this report 14 April 2004 (14.04.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

PCT/FR2003/000803

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☒ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-28 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 1-16 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/3-3/3 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
 - ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
 - ☒ not complied with for the following reasons:
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☒ all parts.
 - ☐ the parts relating to claims Nos. _____

Supplemental Box Relating to Sequence Listing

Continuation of Box No. 1, item 2:

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this report was established on the basis that of:
 - a. type of material
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing
 - ☐ contained in the international application as filed
 - ☐ filed together with the international application in computer readable form
 - ☐ furnished subsequently to this Authority for the purpose of search and/or examination
 - ☐ received by this Authority as an amendment* on _____
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

* If item 4 in Box No. 1 applies, the listing and /or table(s) related thereto, which form part of the basis of the report, may be marked "superseded".

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3

The various inventions are as follows:

1. The use of a block copolymer, containing phosphate or phosphonate functions, as an adhesion promoter (claim 1);
2. The use of a block copolymer, containing phosphate or phosphonate functions, as an anti-corrosion agent (claim 2); and
3. An aqueous film-forming composition containing a block copolymer in which the block containing phosphate or phosphonate functions is a homopolymer based on a monomer containing phosphate or phosphonate functions (claim 15).

Said inventions are not so linked as to form a single general inventive concept (PCT Rule 13.1) for the following reasons:

In claim 15, the "special technical feature" that determines a contribution over the prior art of D2 (EP-A-1 156 089) is the fact that the block containing the phosphate groups is a homopolymer (see Box V hereinafter). Use claims 1 and 2 do not contain this or any corresponding feature (PCT Rule 13.2).

Moreover, the concept common to both claims 1 and 2 is the fact that said two claims relate to the use of the same polymer. Since said polymer is known from D2, the

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV.3

common concept linking these two claims is not novel.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1, 15	YES
	Claims	2	NO
Inventive step (IS)	Claims	1, 15	YES
	Claims	2	NO
Industrial applicability (IA)	Claims	1-16	YES
	Claims		NO

2. Citations and explanations

1. Novelty and inventive step (PCT Article 33(2) and 33(3)).

(a) Reference is made to the following documents:

D1: US-B1-6 174 953 (HUYBRECHTS JOSEF) 16 January 2001 (2001-01-16);

D2: EP-A-1 156 089 (DU PONT) 21 November 2001 (2001-11-21);

D3: DE 100 29 694 A (BASF AG) 20 December 2001 (2001-12-20).

(b) Claim 15 is considered to be novel and inventive.

Document D1 describes block copolymers that can be used in coating compositions. In column 2, lines 39-45, it is explained that monomers containing phosphate or phosphonate functions can optionally be used.

D1 does not describe block copolymers in which the

block containing phosphate or phosphonate functions is a homopolymer based on a monomer containing phosphate or phosphonate functions. It follows that claim 15 is novel over D1.

Document D2 describes block copolymers containing phosphate functions (claims 1, 5 and 13, page 10). In said copolymers, the block containing phosphate functions is not a homopolymer based on a monomer containing phosphate functions. Said block is a copolymer produced by means of a reaction (of hydroxy, epoxy, etc. functions; cf. paragraphs 45-47) with phosphoric acid or the like.

As a result, claim 15 is novel over D2.

(c) Claim 2 is not novel.

D2 relates to metal pigments with enhanced gloss and dispersibility properties. In D2, the phosphate-containing polymer is used to protect the pigment (metal surface) from corrosion: the pigment is passivated to limit the occurrence of oxidation-reduction reactions that generate gas emissions and cause damage to the metal (cf. paragraphs 2-4 and 31). Claim 2 is not, therefore, novel over D2.

(d) Claim 1 is considered to be novel and inventive.

None of the available documents describes or suggests the use of a block copolymer containing phosphate or phosphonate functions as an adhesion promoter.